

ABSTRACT OF THE DISCLOSURE

Methods and apparatus for protecting copyrighted information, e.g., video signals, from unauthorized copying. Analog red (R), green (G) and blue (B) video signals are transmitted from a source device, e.g., a display adapter, to a display device, e.g., a monitor, over corresponding analog signal lines after the identify of the destination device is confirmed by receipt of a certificate assigned to the destination device. A session key, used for encrypting the analog signals, is generated and exchanged between the source and destination devices after the identification of the destination device is confirmed. The source and destination devices each includes a pseudo-random number generator driven by the session key. The lines that carry the R, G and B video signals are changed, e.g., swapped, on a periodic basis as a function of the output of the pseudo-random number generator in the source device. The destination device, which has an input to its pseudo-random number generator synchronized with the random number generator of the source device, decrypts the received video signals in a complimentary fashion to the encryption. Encrypted digital information subject to copying constraints may be supplied to a display adapter via an IEEE 1394 compliant bus.